

## INTERNATIONAL SEARCH REPORT

International Application No

PL./US 99/30265

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61B5/11

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 413 116 A (RADKE JOHN C ET AL) 9 May 1995 (1995-05-09) abstract  column 14, line 13 -column 15, line 26 figure 2 ---	1,8,10, 13,14,23 9,11, 110, 112-114
A	US 4 813 436 A (AU JAN C) 21 March 1989 (1989-03-21)  abstract; figure 1 ---	1-4,6, 8-12, 110-113
A	US 4 699 156 A (GRACOVETSKY SERGE) 13 October 1987 (1987-10-13) column 1, line 10 - line 32 ---  -/--	1-6,10, 110,111

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

6 April 2000

Date of mailing of the international search report

02.08.2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Martelli, L

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 655 227 A (GRACOVETSKY SERGE) 7 April 1987 (1987-04-07) column 13, line 27 - line 60 claims 1,5; figure 4 ---	1,110, 111
A	US 5 320 102 A (O'BYRNE ELIZABETH ET AL) 14 June 1994 (1994-06-14) abstract ---	1,8,10
A	US 5 445 152 A (BELL RODNEY E ET AL) 29 August 1995 (1995-08-29) abstract -----	1,8,10

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International application No.  
PCT/US 99/30265

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 24-46  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-14, 22, 23, 110-115

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

**1. Claims: 1-14,22,23,110-115**

Assessing conditions of a joint by comparing the movement patterns of the joint with cartilage degeneration patterns obtained by observing external markers.

**2. Claims: 15-21**

Determination of cartilage degeneration by MRI

**3. Claims: 47-90**

Assessing conditions of a joint by observing contacts between opposing cartilage surfaces.

**4. Claims: 91-109**

Assessing conditions of a joint by comparing the movement patterns (e.g. gait analysis) of internal parts obtained by MRI.

**5. Claims: 116-128,152-167**

System for transferring data associated to patterns to a remote location.

**6. Claims: 129-151,168-193,218-221**

Assessing joint conditions by determining cartilage volume or thickness.

**7. Claims: 194-217**

Assessing joint condition by detecting biochemicals in the joint.

**8. Claims: 222-228**

Skin markers.

**9. Claims: 229-240**

Method for correlating internal cartilage image data, bone image data and optometrical image data of a joint using superimposed external markers.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5413116 A	09-05-1995	US 5533519 A	09-07-1996
US 4813436 A	21-03-1989	NONE	
US 4699156 A	13-10-1987	CA 1219673 A	24-03-1987
US 4655227 A	07-04-1987	CA 1220273 A	07-04-1987
US 5320102 A	14-06-1994	NONE	
US 5445152 A	29-08-1995	US 5442858 A	22-08-1995